

Amendments to the Claims:

1. (Currently amended) A device for treating blood in an extracorporeal circuit comprising a venous blood reservoir having an inlet and an outlet, a heat exchanger having an inlet and an outlet, a pulsating pump having an inlet connected to receive blood from the outlet of the heat exchanger, and an outlet, an oxygenation apparatus having an inlet and an outlet, and an arterial blood filter having an inlet and an outlet, wherein the venous blood reservoir, heat exchanger, pump, oxygenation apparatus, and arterial blood filter are integrated into a single monolithic assembly,

wherein the outlet of the venous reservoir is connected to the inlet of the heat exchanger, the outlet of the pump is connected to the inlet of the oxygenation apparatus, and the outlet of the oxygenation apparatus is connected to the inlet of the arterial filter.

2. (Original) The device according to claim 1, further comprising a cardiotomy reservoir that is monolithically connected to the venous blood reservoir.

3. (Canceled).

4. (Previously presented) The device according to claim 1, wherein the device comprises a first hollow cylindrical structure for containing the oxygenation apparatus, wherein the first hollow cylindrical structure is suitable to accommodate the heat exchanger, and wherein the first hollow cylindrical structure supports the venous blood reservoir and the pump, respectively, at an upper end face and at a lower end face, and wherein the device comprises a second

hollow cylindrical structure monolithically connected to the first hollow cylindrical structure and being suitable to contain the arterial blood filter.

5. (Original) The device according to claim 1, wherein the device comprises a first hollow cylindrical structure which accommodates the heat exchanger and supports the venous blood reservoir and the pump so as to arrange in a coaxial and directly facing configuration the outlet of the venous blood reservoir and the inlet of the heat exchanger, and the outlet of the heat exchanger with the inlet of the pump.

Claims 6 to 10 (Canceled).